

Title (en)

Tunable optical filter based on a deformable diffractive element

Title (de)

Durchstimmbares optisches Filter basierend auf einem verformbaren diffraktiven Element

Title (fr)

Filtre optique accordable sur la base d'un élément diffractif déformable

Publication

**EP 1365279 B1 20051130 (EN)**

Application

**EP 03001966 A 20030130**

Priority

US 14654302 A 20020514

Abstract (en)

[origin: EP1365279A2] The tunable optical filter includes an elastic substrate (104), a diffractive element (102) in the elastic substrate, an actuator (106) for stretching the elastic substrate to control the pitch of the diffractive element, a first optical path (110) and a second optical path (112). The diffractive element optically couples the second optical path to the first optical path at an optical frequency determined by the pitch of the diffractive element. <IMAGE>The tunable optical filter includes an elastic substrate (104), a diffractive element (102) in the elastic substrate, an actuator (106) for stretching the elastic substrate to control the pitch of the diffractive element, a first optical path (110) and a second optical path (112). The diffractive element optically couples the second optical path to the first optical path at an optical frequency determined by the pitch of the diffractive element. <IMAGE>

IPC 1-7

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IPC 8 full level

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CPC (source: EP US)

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Cited by

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**EP 1365279 A2 20031126**; **EP 1365279 A3 20031203**; **EP 1365279 B1 20051130**; DE 60302492 D1 20060105; DE 60302492 T2 20060817; JP 2004004832 A 20040108; US 2003215183 A1 20031120; US 7027688 B2 20060411

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